

**Amendments to and Listing of the Claims:**

Please amend claims 11, 19, 23-25, 31-33 and 36 without prejudice as follows:

1-10 (canceled)

11. (currently amended) A method of assessing [the] viability of a spore after a sterilization treatment, comprising:

- (a) exposing a spore to a sterilization treatment;
- (b) examining the [treated] spore of step (a) after treatment using multiangle light scattering; and
- (c) evaluating a difference between the multiangle light scattering of the [treated] spore treated in step (a) and a multiangle light scattering of a like spore not exposed to a sterilization treatment to evaluate a change in spore morphology and determine whether the [treated] spore treated in step (a) is viable.

12. (previously presented) The method of claim 11, wherein the spore and the like spore are selected from the group consisting of a *B. subtilis* spore, and a *B. stearothermophilus* spore.

13. (previously presented) The spore of claim 12, wherein the spore and the like spore are *B. subtilis*.

14. (previously presented) The spore of claim 12, wherein the spore and the like spore are *B. stearothermophilus*.

15. (previously presented) The method of claim 11, wherein the sterilization treatment is selected from the group consisting of a chemical sterilization treatment, and a physical sterilization treatment.

16. (previously presented) The method of claim 15, wherein the chemical sterilization treatment is selected from the group consisting of an ethylene oxide sterilization treatment, a hydrogen peroxide sterilization treatment, a tetrasilver tetraoxide sterilization treatment, and an ozone sterilization treatment.

17. (previously presented) The method of claim 15, wherein the physical sterilization treatment is selected from the group consisting of a radiation sterilization treatment, a gas plasma sterilization treatment, a steam sterilization treatment, and a dry heat sterilization treatment.

18. (previously presented) The method of claim 11, further comprising examining the like spore using multiangle light scattering prior to the sterilization treatment of the spore in step

(a) to provide a standard multiangle light scattering data set for use as the multiangle light scattering of the like spore in step (c).

19. (currently amended) The method of claim 18, further comprising storing the standard multiangle light scattering data set to assess viability of a second like spore after sterilizing the second like spore using the sterilization treatment of step (a).

20. (currently amended) The method of claim 11, further comprising incubating the [treated] spore treated in step (a) with a growth medium prior to step (b).

21. (previously presented) The method of claim 20, wherein the growth medium is selected from the group consisting of trypticase soy broth, nutrient broth, and brain heart infusion broth.

22. (previously presented) The method of claim 20, further comprising incubating the spore up to about 24 hours prior to step (b).

23. (currently amended) The method of claim 20, further comprising heat-shocking the [treated] spore treated in step (a) prior to incubating the treated spore with the growth medium.

24. (currently amended) The method of claim 11, wherein the sterilization treatment is selected from the group consisting of a steam sterilization treatment, and an ozone sterilization treatment, and the method further comprises examining the [treated] spore directly after the sterilization treatment.

25. (currently amended) A method of assessing [the] efficacy of a sterilization treatment, comprising

- (a) exposing a biological indicator to a sterilization treatment;
- (b) examining a like biological indicator which has not been exposed to a sterilization treatment using multiangle light scattering to create a standard profile;
- (c) examining the [treated] biological indicator treated in step (a) using multiangle light scattering to create a post-sterilization profile; and
- (d) comparing the post-sterilization profile of the [treated] biological indicator treated in step (a) to the standard profile [of the like biological indicator], wherein a difference between the post-sterilization profile of the [treated] biological indicator treated in step (a) and the standard profile [of the like biological indicator] indicates [the] efficacy of the sterilization treatment.

26. (previously presented) The method of claim 25, wherein the biological indicator and the like biological indicator are *B. subtilis* spores.

27. (canceled)

28. (previously presented) The method of claim 25, wherein the sterilization treatment is selected from the group consisting of a physical sterilization treatment, and a chemical sterilization treatment.

29. (previously presented) The method of claim 28, wherein the chemical sterilization treatment is selected from the group consisting of a tetrasilver tetraoxide sterilization treatment, an ethylene oxide sterilization treatment, a hydrogen peroxide sterilization treatment, and an ozone sterilization treatment.

30. (previously presented) The method of claim 28, wherein the physical sterilization treatment is selected from the group consisting of a radiation sterilization treatment, a gas plasma sterilization treatment, a dry heat sterilization treatment, and a steam sterilization treatment.

31. (currently amended) The method of claim 25, wherein the sterilization treatment is selected from the group consisting of a steam sterilization treatment, and an ozone sterilization treatment, and the method further comprises examining the [treated] spore directly after the sterilization treatment.

32. (currently amended) A method of detecting a change in a biological indicator exposed to a sterilization treatment, comprising exposing a biological indicator to a sterilization treatment, and comparing a multiangle light scattering of the [treated] biological indicator after exposing the biological indicator to the sterilization treatment to a multiangle light scattering of a like biological indicator not exposed to a sterilization treatment, wherein a difference between the multiangle light scattering of the [treated] biological indicator after exposing the biological indicator to the sterilization treatment and the multiangle light scattering of the like biological indicator indicates a change in the [treated] biological indicator after exposing the biological indicator to the sterilization treatment.

33. (currently amended) The method of claim 32, further comprising incubating the [treated] biological indicator after exposing the biological indicator to the sterilization treatment with a growth medium for up to about 24 hours before examining the multiangle light scattering of the biological indicator.

34. (previously presented) The method of claim 33, further comprising heat-shocking the biological indicator prior to incubating the biological indicator with the growth medium.

35. (previously presented) The method of claim 32, further comprising using an instrument selected from the group consisting of a nephelometer, and a photometer to examine the multiangle light scattering of the biological indicator.

36. (currently amended) The method of claim 32, wherein the sterilization treatment is selected from the group consisting of a steam sterilization treatment, and an ozone sterilization treatment, and the method further comprises examining the [treated] spore directly after the sterilization treatment.

37.-38. (Canceled)